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Sta # 10 SEP 20 1988		<b>ENGINEERING DATA TRANSMITTAL (EDT)</b> (USE BLACK INK OR TYPE)		Page 1 of 1	
(2) To: (Receiving Organization) DISTRIBUTION ENVIRON. PROJECTS 24320		(3) From: (Originating Organization) WASTE MGMT PROJECTS 24320		(1) EDT 101290	
(5) Proj/Prog/Dept/Div: B-714 / PROJECTS 24320		(6) Cogn/Proj/Eng: SR BRIGGS 3-3729		(4) Related EDT No: NA	
(8) Originator Remarks: INITIAL RELEASE OF DWGS & SPEC.				(7) Purchase Order No: NA	
(11) Receiver Remarks: NA				(9) Equip/Component No: NA	
				(10) System/Bldg/Facility: NA	
				(12) Major Assm Dwg No: NA	
				(13) Required Response Date: NA	

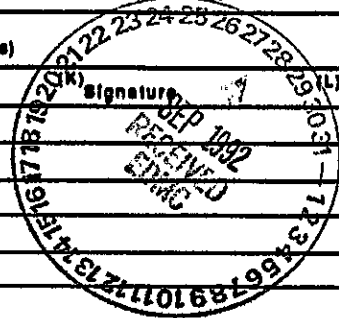
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(14) DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/ Drawing, No.	(C) Sh. No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Impact Level	Reason for Trans- mission	Originator Dispo- sition	Receiver Dispo- sition
1	H-2-77579	1	0	EXCAVATION DWG	3	2		
2	H-2-77579	2	0	EXCAVATION DWG	3	2		
3	B-714-C2-001	—	0	CONSTRUCTION SPECIFICATION	3	2		
4								
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KEY

Impact Level (F) 1, 2, 3, or 4 see MRP 5.43 and EP 1.7	Reason for Transmittal (G) 1. Approval 2. Release 3. Information 4. Review 5. Post-Review	Disposition (H) & (I) 1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged
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(16) SIGNATURE/DISTRIBUTION (See Impact Level for required signatures)					(H)
(J) Name	(K) Signature	(L) Date	(J) Name	(L) Date	Reason Disposition
1 MO NORTHLEY	MD Northley	7/27/88			
2 SR BRIGGS	SR Briggs	9/29/88			
2 SR MCGEE	SR McGee	7/6/88			
2 J C McGee	J C McGee	9/10/88			
DOE-PMD					



(17) Signature of EDT Originator SR Briggs 9/29/88	(18) Authorized Representative Date for Receiving Organization [Signature] 9/29/88	(19) Cognate/Project Engineer's Date [Signature] 9/29/88	(20) DOE APPROVAL (M required) LTR No. [ ] Approved [ ] Approved w/comments [ ] Disapproved w/comments [ ]
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CONSTRUCTION SPECIFICATION FOR  
EXCAVATION  
FOR  
GROUTED WASTE DISPOSAL FACILITIES  
GROUT VAULT PAIR (218-E-16-102 AND 103)

Work Order ER1060

Prepared By:

KAISER ENGINEERS HANFORD COMPANY  
Richland, Washington

For the US Department of Energy

Contract DE-AC06-87RL10900

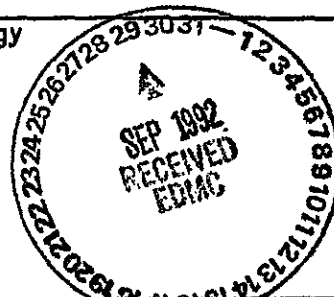
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<u>W.J. Maguire</u> Principal Lead Engineer	<u>9/27/88</u> Date	<u>W.H. Luella</u> Technical Documents	<u>9/27/88</u> Date
<u>A. Barth</u> Safety	<u>9-27-88</u> Date	<u>Al Ray</u> Environmental	<u>9/28/88</u> Date
<u>D.P. Kuer</u> Quality Assurance	<u>9/28/88</u> Date	<u>[Signature]</u> Project Manager	<u>9/30/88</u> Date
WESTINGHOUSE HANFORD COMPANY			
<u>A.R. Briggs</u> Projects Department			<u>9/30/88</u> Date

Released for Construction:

N/A  
U. S. Department of Energy

714CV-TC.SP1.445



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SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.1 INTRODUCTION

1.1.1 Project B-714 for construction of grout disposal vaults is located near the 200-E Area in the Controlled Access Area of the Hanford Site, approximately 28 road miles north of Richland, Washington.

1.1.2 This Specification provides for earthwork activities as shown on the Drawings.

1.2 STATEMENT OF WORK

1.2.1 Scope: The work consists of furnishing labor, equipment, and materials for the earthwork portion of the facility in accordance with these Contract Documents.

1.2.2 Work Included: The itemization included herein is intended to be broad in scope to identify major elements. The work shall include but not be limited to the following.

1.2.2.1 Excavate access ramp and 4 vaults. Stabilize berms and access ramp. Maintain access ramp, berms, and access roads.

1.2.3 Work Not Included: These items are not to be done under this package. All of these items will be accomplished by future packages.

1.2.3.1 Concrete basin and vault structures, leachate collection tank, gravel diffusion barrier, and initial backfill for 2 vaults.

1.2.3.2 Concrete basin liner.

1.2.3.3 Vault cover blocks.

1.2.3.4 Backfill to grade, including shielding, closure cover, and final site stabilization.

1.2.3.5 Site electrical and instrumentation, and conduit runs for vaults.

1.2.3.6 Encased piping for vault, and pipe runs for future vaults, including transfer pit, and 4 excess water removal pits for each vault.

1.2.3.7 Ground water monitoring well E25-33.

1.2.3.8 Ground water monitoring wells casing removal.

1.2.3.9 Run-on/run-off drainage control ditch.

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1.3 DRAWINGS

1.3.1 Drawings for this work are Drawing H-2-77579 Sheets 1 and 2.

1.3.2 Other drawings related to work covered by the Contract Documents are listed on the Schedule of Drawings.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION

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SECTION 01027  
APPLICATION FOR PAYMENT

PART 1 GENERAL

1.1 REFERENCES: Not used.

1.2 SUBMITTALS: Not used.

1.3 APPLICATION PROCEDURE

1.3.1 Payments to Contractor set forth in Section 15 of Contract General Conditions are initiated by Contractor making application for payment as follows.

1.3.1.1 Complete "Progress Estimate Backup" Form KEH-1026 (sample appended) furnished by KEH and include following either in letter requesting payment or at end of Progress Estimate Backup:

Total Completed to Date*	\$XX,XXX.XX
Retainage (10%)(___)	\$ X,XXX.XX
Less Previous Payments	\$XX,XXX.XX
Other Charges from KEH	XX.XX
Subtotal	( X,XXX.XX)

Total Amount This Payment \$XX,XXX.XX

\*Includes amount for payment on stored materials and contract modifications.

1.3.1.2 Review information with KEH approximately 5 days before end of pay period, adjust data, if required, initial, and return to KEH.

1.4 PAYMENT PROCEDURE

1.4.1 Upon receipt of approved application, KEH will prepare payment documents and send original and 2 copies to person authorized by Contractor to sign documents.

1.4.2 After signing payment documents original and 1 copy shall be returned to KEH for processing. No processing of checks will be done by KEH until signed payment document is returned.

1.4.3 KEH will mail check to Contractor's designated office.

1.5 ADDITIONAL DATA REQUIRED

1.5.1 When processing applications for payment and preparing payment documents, KEH may require data to substantiate and justify amounts requested. Processing of payment documents may be delayed if data is not forwarded expeditiously to KEH.

1.5 ADDITIONAL DATA REQUIRED

1.5.1 When processing applications for payment and preparing payment documents, KEH may require data to substantiate and justify amounts requested. Processing of payment documents may be delayed if data is not forwarded expeditiously to KEH.

1.5.2 Requests for payment for equipment or material which Contractor has received, but has not installed, shall be accompanied by invoice or other data to provide evidence that title to equipment or material is held by Contractor.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

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## PROGRESS ESTIMATE BACKUP

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SECTION 01040

COORDINATION

PART 1 - GENERAL

1.1 REFERENCES: Not Used

1.2 SUBMITTALS: Not Used

1.3 CONSTRUCTION ACTIVITIES

1.3.1 Coordinate construction activities to ensure efficient and orderly sequence of work, with provisions for accommodating items to be installed later.

1.3.2 It is not anticipated that other contractors noted in Section 29 of the Contract General Conditions will be working in vicinity of the Work included in this Specification.

1.3.3 Certain work related to Project will be performed by onsite construction. Cooperate and coordinate work to eliminate interferences and delays. Removal of well casing and associated work at ground water monitoring well E25-33 will be responsibility of KEH. Coordinate activities during removal to expedite work and minimize downtime.

1.4 WORK IN EXISTING FACILITIES

1.4.1 Grout Vault 101 is an operating facility. Plan and schedule work to prevent interference with plant operations and to sustain safety of operating personnel.

1.4.2 Access to Grout Vault 101 work area shall be directed by KEH to minimize disruptions to work force.

1.4.3 Keep work area safe and orderly for construction and operating personnel. Clean area after each work period. Keep equipment and materials away from traffic areas.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

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SECTION 01043

JOB SITE ADMINISTRATION

PART 1 - GENERAL

1.1 REFERENCES: Not Used

1.2 SUBMITTALS: Not Used

1.3 BADGE, DOSIMETER, AND ORIENTATION

1.3.1 Work being near the 200-E Area in the Controlled Access Area of the Hanford Site, the following is applicable.

1.3.1.1 Badge, dosimeter, and orientation requirements in accordance with Section 56 of Contract General Conditions.

1.4 EVACUATION DRILLS

1.4.1 Personnel are required to participate in emergency evacuation drills held monthly and lasting approximately 1 hour.

1.4.2 Maintain daily log or other suitable record of names of personnel including subcontractors working.

1.5 SECURITY

1.5.1 Policy and Procedures: Contractor employees are required to meet with security policy and procedures set forth in KEH-MA-6, Safeguards and Security Manual. Copies of manual will be provided to Contractor upon request after award of Contract.

1.6 WORKING HOURS

1.6.1 Regular day shift working hours are from 7:30 a.m. to 4:00 p.m. Monday through Friday except holidays.

1.6.2 For other than normal working hours refer to Section 51 of the Contract General Conditions.

1.7 FIRE SAFETY

1.7.1 Contractor is required to address fire safety as part of construction safety plan required by Section 55 of Contract General Conditions. Incorporate following fire safety requirements into construction safety plan.

1.7.1.1 Maintain fire watch for period of 1/2 hour after cessation of welding, cutting, or grinding.

1.7.1.2 Utilize portable shields wherever welding, cutting, or grinding.

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1.7.1.3 Have fully charged fire extinguishers available whenever welding, cutting, or grinding.

1.7.1.4 Means to control ignition of brush fires.

1.7.2 See Section 01500 for off-road driving and grass fire prevention requirements.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

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SECTION 01050

SURVEY AND FIELD ENGINEERING

PART 1 - GENERAL

1.1 REFERENCES: Not Used.

1.2 SUBMITTALS: Not Used.

1.3 QUALITY CONTROL

1.3.1 Establishing alignment and grades shall be the responsibility of a Land Surveyor registered in the State of Washington and acceptable to KEH.

1.3.2 Use skilled personnel trained and experienced in construction staking and familiar with requirements and methods needed for proper performance of work.

1.3.3 Deliver field notes, records, and documentation to KEH to review and verify procedures used and accuracy of work.

1.4 SURVEY DATA

1.4.1 Basic reference points with coordinate descriptions and bench mark with elevation identified will be located by others.

1.4.2 Contractor shall be responsible for preservation of bench marks and reference points, including stakes or other markers established until removal is authorized by KEH.

1.5 PROCEDURES

1.5.1 Before initial layout, field verify horizontal and vertical data furnished. Report discrepancies to KEH before proceeding.

1.5.2 Establish adequate number of permanent reference points, to be used during construction, referenced to original control points. Record locations with horizontal and vertical data on project record documents.

1.5.3 Protect and preserve control and reference points until work is complete. Report loss or destruction of control points to KEH. Report relocation or change in data affecting reference points.

1.5.4 Periodically verify data for each control and reference points, and construction stakes to maintain construction accuracy.

1.5.5 After excavation survey excavated area to verify limits and slope of excavation and provide final survey notes to KEH.

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**PART 2 - PRODUCTS**

**Not Used.**

**PART 3 - EXECUTION**

**Not Used.**

END OF SECTION

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SECTION 01065

PERMITS

PART 1 - GENERAL

1.1 REFERENCES: Not Used.

1.2 SUBMITTALS: Not Used.

1.3 FEDERAL, STATE, AND MUNICIPAL LAWS, CODES, AND REGULATIONS

1.3.1 Permits or licenses to do business required by Federal, State, and Municipal laws, codes, and regulations are the responsibility of the Contractor as stated in Section 6 of Contract General Conditions.

1.4 HANFORD SITE PERMITS

1.4.1 General: Before certain types of work can be performed at Hanford, Contractor is required to have a permit. Permits are provided by KEH at no cost, however, Contractor shall furnish information required and notify KEH in advance of work which requires a permit. Contractor shall meet the requirements and restrictions set forth in each permit.

1.4.2 Excavation: Do not excavate without permit set forth in subsection 50.9 of Contract General Conditions. Post permit at Site.

1.4.3 Backfill Permit: Permit required for each element of fill and backfill and good for 5 days or duration of work element provided Work does not stop for 5 consecutive days. Complete permit form, furnished by KEH, and return to KEH for approval before starting work. Permit shall be kept at Site.

1.4.4 Oversize Load Permits: In addition to a Washington State permit, obtain from KEH permits for each movement of each oversize vehicle or load within the Hanford Site. See Section 01500, subparagraph 1.6.3.2 for additional requirements.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION

SECTION 01200  
PROJECT MEETINGS

PART 1 - GENERAL

1.1 REFERENCES: Not Used

1.2 SUBMITTALS: Not Used

1.3 MEETING PROCEDURES

1.3.1 Representatives from KEH and Contractor, including major subcontractors, shall participate in project meetings.

1.3.2 Meeting times and locations shall be mutually agreed to by Contractor and KEH, and will be held at the Hanford Site in Richland, Washington. KEH will issue notices of meetings and prepare minutes. Meeting minutes will be distributed to project participants.

1.4 SITE LABOR CONFERENCE

1.4.1 Before starting construction onsite, attend informational conference on Hanford Site labor requirements applicable to Project. KEH will schedule, give advance notice, and chair meeting to be attended by representatives from labor organizations whose members may be utilized in construction. Labor provisions in the Contract General Conditions will be reviewed.

1.5 PRECONSTRUCTION MEETING

1.5.1 Meeting will be scheduled by KEH before start of onsite work. Authorized representatives of Contractor and major subcontractors shall attend. KEH will advise others having interest in Project. Meeting will be chaired by KEH.

1.5.2 Following items, as minimum, will be incorporated into agenda for meeting.

1.5.2.1 Point of contact, key personnel (Operating Contractor, Safety, QA/QC, Acceptance Inspectors, etc) and contracts personnel.

1.5.2.2 Schedule requirements and restraints, submittals and work limitations.

1.5.2.3 Safety, construction progress meetings and frequency, and certified payrolls.

1.5.2.4 Report requirements and frequency.

1.5.2.5 Major material and equipment lists.

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1.5.2.6 Other pertinent items.

1.6 CONSTRUCTION PROGRESS

1.6.1 Meetings held biweekly at time and location determined at preconstruction meeting will be approximately 1 hour long.

1.6.2 KEH will chair meeting and request attendance of key personnel required. Authorized representative of Contractor and pertinent subcontractors shall attend.

1.6.3 Purpose of meetings is to monitor status and provide forum for exchange of pertinent Project information. Major topics may include, but not be limited to, following.

1.6.3.1 Schedule, cost and construction status.

1.6.3.2 Design and scope changes

1.6.3.3 Submittal status, key material and equipment delivery status.

1.6.3.4 Potential problem areas.

1.6.3.5 Action item status, goals for next meeting.

1.6.3.6 Other appropriate items.

1.6.4 Minutes will be issued by KEH as promptly as possible following meeting. Action items will be identified with assigned followup. Issues resolved will be reported in the minutes, as well as closed action items.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

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## SECTION 01300

### SUBMITTALS

#### 1.1 DESCRIPTION

1.1.1 This Section summarizes requirements for submittal of documents defined in Part 1 of each Section of the Specification and describes procedures for supplemental submittals.

#### 1.2 SUBMITTALS

1.2.1 Submittals listed in Part 1 of each Section require either review and approval or review for record.

1.2.1.1 Review and approval: Submittals shall have been approved and returned to Contractor before proceeding with procurement, fabrication, or construction.

a. Approved submittals are identified by submittal stamp with "Approved" or "Approved with Exception" box checked. "Approved" signifies general concurrence to achieve conformance with design concept of the Project and compliance with requirements of Contract Documents. "Approved with Exception" signifies general concurrence with noteworthy comments or clarifications. Approval of submittals does not relieve Contractor of responsibility for errors contained therein.

b. Submittal not approved is identified on submittal stamp as "Not Approved, Revise and Resubmit." Submittal is considered by KEH to be technically deficient or incomplete and unacceptable. Resubmittal is required, hence fabrication, procurement, or performance of procedures shall not proceed.

1.2.1.2 Review for record: Contractor may proceed with procurement, fabrication, or construction, however, acceptance is contingent upon compliance with the Drawings and Specifications. Incomplete or inaccurate submittal data will be returned to Contractor with appropriate comments and items procured or work performed shall be corrected.

1.2.2 Supplemental Submittals: Submittals initiated by Contractor for consideration of "equal substitute" products or corrective procedures shall contain sufficient data for review and approval.

1.2.2.1 Equal substitute product submittals must contain outline dimensions, operating clearances, and sufficient engineering data to indicate substantial compliance with the Drawings and Specifications.

a. Identify each submittal by specification number, Section and Paragraph number; or referenced Drawing number and detail.

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b. Improperly identified submittals will be returned without consideration.

### 1.3 SUBMITTAL PROCEDURES

1.3.1 Submittals are itemized in Article 1.4 and are identified by submittal number and title. Identify each submittal by Specification number and submittal number noted in schedule. Number of copies required for retention by KEH are shown in schedule and include 2 copies to be returned to Contractor. Additional copies required for Contractor uses must be added.

1.3.2 Contractor shall review submittals before forwarding data to KEH. Contractor shall sign data transmittal form showing submittal has been reviewed for compliance with Contract Documents. Contractor's signature represents he has verified materials and field measurements, and checked and coordinated information contained within submittals with requirements of Contract Documents. Only signed submittals shall be forwarded to KEH. Submittals not signed will be returned without review.

### 1.4 SCHEDULE OF SUBMITTALS

Submittal Number	Submittal Title	Quantity	Review and Approval	Review For Record
<b>CONTRACT GENERAL CONDITIONS</b>				
55.2	Safety Program and Job Safety Analysis	5	Before badging	
55.3	Industrial Injury/ Illness Experience	5		5 days before start of work and each month
55.5.1	OSHA Form No. 200 Report	5		5th working day, each month
55.6	Equipment Certi- fication	5		2 days before bringing equipment onsite
<b>PROGRESS SCHEDULES</b>				
01310/1.2.1	Progress Schedule	5	10 days after notice to proceed	

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SECTION 01310  
PROGRESS SCHEDULES

PART 1 - GENERAL

1.1 REFERENCES: Not used.

1.2 SUBMITTALS: Refer to Section 01300 for submittal procedures.

1.2.1 Progress Schedules: Submit schedule required in Article 1.3.

1.3 PROGRESS SCHEDULES

1.3.1 Schedule identified in Section 5 of Contract General Conditions shall be in accordance with following.

1.3.1.1 Show order Contractor proposes to carry on the Work, dates it will start the several salient features of the Work including procurement of materials and equipment, and contemplated dates for completion. Each schedule shall be in the form of a horizontal bar chart of suitable scale to show percentage of Work scheduled for completion at any time with separate bar for each activity. At end of each week or at end of other periods of time specified in Contract, Contractor shall prepare and submit 1 copy of chart showing actual progress at the end of period.

1.3.2 Organize schedule to show activities relative to each major subcontractor and supplier. Provide subschedule to define critical portions of entire schedule.

1.3.3 Schedule shall include design activities and milestones, delivery date of design documents, construction activities, progress milestones, and include but not be limited to following activities.

1.3.3.1 Bonds and insurance.

1.3.3.2 Mobilization.

1.3.3.3 Survey.

1.3.3.4 Construct berm.

1.3.3.5 Excavation.

1.3.3.6 General cleanup.

1.3.3.7 Punchlist and demobilize.

1.3.4 Schedule shall show, as minimum, accumulated percentage of completion of each activity and total percentage of work completed as of last work day of each month.

1.3.4.1 Develop an "S" curve from percentage of total work figures and superimpose on the schedule.

1.3.4.2 Show dollar value or percent of total next to each activity shown on schedule. Figures will be basis for determining progress payments described in Section 01027.

#### 1.4 REVISIONS TO SCHEDULES

1.4.1 Whenever KEH determines there are significant variances between actual and scheduled progress, endangering completion within Contract completion time, Contractor may be required to prepare and submit revised progress schedule.

1.4.2 Show progress to date of submittal and projected completion date of each activity. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.

1.4.3 Provide narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect, including effect of changes on schedules of separate contractors.

1.4.4 Distribute copies of revised schedules to KEH, job site file, subcontractors, suppliers, and other concerned entities. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in revised schedules.

1.4.5 If Contractor fails to submit progress schedule specified in Paragraph 1.3.1 within prescribed time, or updated progress schedule specified in Paragraph 1.4.1, within requested time, KEH may withhold approval of progress payments until time Contractor submits required progress schedules.

#### PART 2 - PRODUCTS

Not used.

#### PART 3 - EXECUTION

Not used.

END OF SECTION

SECTION 01400  
QUALITY ASSURANCE

PART 1 - GENERAL

1.1 REFERENCES: Not Used.

1.2 SUBMITTALS: Not Used.

1.3 INSPECTION AND TESTING

1.3.1 In accordance with Section 19 of Contract General Conditions, KEH will perform following inspections and tests.

1.3.1.1 Soil compaction tests required in Section 02200.

1.3.1.2 Witness specific inspection and witness points.

1.3.1.3 Perform final acceptance inspection.

1.3.2 Specific Inspection and Witness Points: Contractor shall adhere to inspection points required. Contractor shall assure their personnel have completed inspections of and approved portions of work in accordance with Contract requirements before notifying KEH.

1.4 NONCONFORMANCE REPORTING AND RESOLUTION

1.4.1 Three degrees of nonconformances used to show noncompliance with Contract requirements are as follows.

1.4.1.1 Obvious nonconformance: Corrective action is as obvious as nonconformance, not identified by tag, and normally corrected by Contractor without notification.

1.4.1.2 Open items nonconformance: Identified by blue nonconformance report (NCR) tag or written notification, is readily correctable to meet Drawings and Specifications and does not require deviation from Contract requirements or design. Can be corrected by Contractor without additional direction, deviation, or change to Contract requirements.

1.4.1.3 Report nonconformance: Identified by blue NCR tag or red construction hold (CH) tag or written notification, requires change to or deviation from Contract requirements and additional direction to Contractor. Changes or deviations shall be approved by KEH. Do not proceed with portion of the Work bearing red tag until installation is determined by KEH to be in compliance with Contract requirements, or specific permission to proceed is received from KEH. Tags are not to be removed by anyone other than inspector who applied tag or by direction of inspector's supervisor.

1.4.2 Differing degrees require different methods of reporting, resolving, and documenting.

1.4.2.1 Obvious nonconformance: Requires documenting only if it remains at time of completion of final punchlist. Documented on final punchlist.

1.4.2.2 Open item nonconformance: Documented for verification of correction on open items list available from KEH upon request.

1.4.2.3 Report nonconformance: Documented on construction nonconformance report (CNCR) or audit finding report (AFR) and requires formal approved resolution.

1.4.3 Contractor shall ensure its organization is represented by individual with sufficient authority to commit Contractor to corrective action requests identified by KEH.

1.4.4 Nonconformances noted during performance of Contract, require resolution before completion and final payment.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION

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SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 REFERENCES

1.1.1 Reference Standards and Specifications: The following standards and specifications, including documents referenced therein, form part of this Section to extent designated herein.

1.1.1.1 National Fire Protection Association (NFPA)

NFPA 701-1977

Standard Methods of Fire Tests for  
Flame-Resistant Textiles and Films

1.1.1.2 Washington State Department of Transportation (WSDOT)

M41-10-84

Standard Specifications for Road,  
Bridge, and Municipal Construction

1.2 SUBMITTALS: Refer to Section 01300 for procedures.

1.2.1 Anchoring and Enclosure Methods: Submit methods proposed for anchoring portable structures and enclosing underfloor area to meet the requirements of this Section.

1.3 CONSTRUCTION FACILITIES

1.3.1 First Aid: Facilities are available at Building 2719EA in the 200 East Area to provide first line medical attention.

1.3.2 Operation and Storage Areas: Confine onsite operations, including storage of materials, to laydown area designated by KEH.

1.3.3 Disposal Site for Waste: Dispose of construction material, broken asphalt, and broken concrete at Central Landfill approximately 7 road miles from Project. Site is open only during regular working hours.

1.4 TEMPORARY UTILITIES

1.4.1 Water

1.4.1.1 Construction: Available from stand pipe located outside 200E perimeter fence adjacent to the Project site. Furnish hauling, dispensing, temporary piping and fittings approved by KEH for connection to water source. Remove temporary piping, hoses, fittings, and valves before final acceptance of the Work.

1.4.1.2 Drinking: Furnish adequate drinking water that meets health and safety requirements to employees.

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1.4.2 Electrical Power: Contractor shall provide electrical needs required.

1.4.3 Telephone

1.4.3.1 Telephone system is operated by General Telephone Company of the Northwest, Inc (GTE). Upon written request, KEH will arrange for telephone service at field offices of Contractor and subcontractors, if facilities are available. KEH will charge Contractor for installation and services in accordance with charge assessed by GTE. Charges will be determined on basis of published tariffs. Information on tariffs may be obtained from DOE's Site Services Contractor, office of the Manager of the Plant Telephone and Radio, Telephone 376-6322.

1.4.3.2 Charges will be deducted from payments due Contractor. Contractor and subcontractors may use provided telephones for long distance calls necessary to the Work. Calls shall be made by valid credit card and cost not charged to Site Services Contractor or KEH.

1.4.4 Sanitary Facilities: Furnish and service chemical or other approved sanitary toilets for use of employees. Facilities shall meet the requirements of KEH which are available upon request.

1.5 ACCESS ROADS AND PARKING AREAS

1.5.1 Access to Project site will be by existing grout perimeter access road having no load restrictions located outside 200 East Area.

1.5.2 Parking: Available in vicinity of the Project outside the Limited Area. "No Parking" signs are posted to show fire and emergency lanes. No on-street parking will be permitted.

1.5.3 Off-Road Driving: Keep off-road driving to minimum. Vehicles driving off-road or to remote locations, shall carry a minimum 10 pound ABC dry chemical portable fire extinguisher, communications equipment consisting of 2-way radio or mobil phone (CB type radios are not acceptable), and shovel. Report fires immediately to nearest Hanford Patrol, telephone 373-1780, and Hanford Fire Department, telephone 373-1311, or emergency number 811.

1.6 TEMPORARY CONTROLS

1.6.1 Dust Control: Maintain work areas to prevent hazard or nuisance to others. Accomplish dust control by sprinkling or other methods approved by KEH. Repeat sprinkling at necessary intervals to keep disturbed area damp at all times. Keep sufficient equipment on the Project job to accomplish dust control as work proceeds and whenever dust nuisance or hazard occurs. No separate or direct payment will be made for dust control and cost shall be considered incidental to and included in contract price.

1.6.2 Temporary enclosures: Plastic sheeting materials used to form enclosures shall have fire retardant properties meeting the requirements of NFPA 701 for small and large scale fire tests. Acceptable manufacturers Winman Corporation, St. Cloud, Minnesota; Lancs Industries, Kirkland, Washington; and Protective Plastics, Inc, Greer, South Carolina.

1.6.3 Traffic Control: Temporary traffic control and barricades in accordance with WSDOT M41-10, Section 1-07.23(3).

1.6.3.1 Vehicle travel

a. Slow moving equipment and wide loads shall not travel on Hanford Site roads during heavy traffic periods between 6:30 and 8:00 a.m., and 3:30 and 5:30 p.m.

b. Do not block existing roads with equipment or vehicles.

c. Do not park on roadway shoulders.

1.6.3.2 Oversized vehicles and loads

a. Permits specified in Section 01065 are required for vehicles or loads exceeding following dimensions.

1) Width: 8'-6".

2) Height: 14 feet.

3) Length: Single unit, 40 feet.  
Single trailing unit, 48 feet.

b. Additional requirements for vehicles and loads exceeding 8'-6" width.

1) Display oversize load sign on front of towing vehicle and rear of trailing unit.

2) Attach red flags to each corner.

3) Notify KEH 5 days before moving loads.

4) Travel between 9:00 a.m. and 2:30 p.m. unless special arrangements are made.

c. Escort vehicle requirements

1) Equip with oversize load signs and amber lights.

2) Vehicles or loads over 10 feet wide: Provide escort cars in front and rear on 2 lane highways.

3) Vehicles or loads over 14 feet wide: Provide escort car in rear on multiple lane highways.

4) Vehicles or loads over 20 feet wide: Provide escort cars in front and rear on multiple lane undivided highways.

d. Electrical escort requirements: Provide qualified electrical escorts when load reaches height of 14 feet or more from road surface, or when clearance of at least 6 feet cannot be maintained from overhead electrical or signal lines.

#### 1.7 FIELD OFFICE

1.7.1 Establish a field office equipped and staffed to conduct the Work. Keep copies of Drawings, Specifications, and other information pertinent to the Work at office. KEH shall have access to documents at all times. Telephone service will be made available at field office as set forth in Paragraph 1.4.3 providing service is available. Contractor may utilize existing telephones at buildings designated by KEH for local calls.

1.7.2 Anchor or tie down portable or relocatable structures, including trailers for field offices and storage, to prevent overturning or lateral movement in winds up to 70 mph, and enclose or skirt underfloor area with material that will not burn or support combustion to prevent accumulation of wind-blown debris and use of underfloor space for material storage. Complete anchoring and enclosing within 14 days of arrival onsite.

#### PART 2 - PRODUCTS

Not used.

#### PART 3 - EXECUTION

Not used.

END OF SECTION

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REFERENCES: Not used.

1.2 SUBMITTALS: Not used.

1.3 RECORD REQUIREMENTS

1.3.1 The nature of work at the Hanford Site requires certain documents, defined herein, be held to record construction process and administration of the Contract. KEH will assemble pertinent data for final disposition. Contractor shall prepare, preserve, and deliver project record documents to KEH required by this Contract. Documents are in addition to submittals required in Section 01300.

1.3.2 Mark project record documents to identify copies for record and to prevent use for construction. Keep record copies of construction documents in field office and make available to KEH during the progress of the Work.

1.3.3 Some data required for project records shall be delivered to KEH during course of construction and contract administration, while other shall be assembled after completion of construction for delivery to KEH. Document delivery by retaining copy of reports delivered during course of work until construction completion, retaining copy of letter of transmittal itemizing delivered items, or other means acceptable to KEH.

1.4 PROJECT RECORD DOCUMENTS

1.4.1 General: Documents required for project records are itemized herein. Identify complete documents by Title or Number. Notes or markings added by hand shall be legible utilizing permanent nonsmearing marking media, such as ink or felt tip markers, in contrasting color.

1.4.2 Contract Documents: Store 1 set in field office, apart from documents used in construction, and maintain in clean, dry, and legible condition. Legibly mark items to record actual construction, including changes to dimensions and details, manufacturer's name, catalog number, and substitute products.

1.4.3 Certified Payrolls: Each week file certified payrolls, required by Section 108 of the Contract General Conditions, with KEH and keep copies in field office until Contract completion. Progress payments will not be processed unless certified payrolls for work period have been received by KEH.

1.4.4 Daily Force and Equipment Report: Before noon each day, furnish KEH 1 copy of detailed daily force report covering labor and supervision of Contractor and each lower tier contractor for previous day. Report shall include general description of work performed and list major items of equipment onsite.

1.4.5 Weekly Manpower Report: Complete weekly manpower reports daily and submit weekly, before 10:00 a.m. on Monday for previous week, during performance period of the Contract. Forms will be furnished by KEH.

1.4.6 Survey Notes: Deliver notes, specified in Section 01050, to KEH to include with Project Record Documents.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION

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SECTION 02200

EARTHWORK

PART 1 - GENERAL

1.1 REFERENCES

1.1.1 Reference Standards and Specifications: The following standards and specifications, including documents referenced therein, form part of this Section to extent designated herein.

1.1.1.1 American Society for Testing and Materials (ASTM)

D 653-86

Standard Terms and Symbols  
Relating to Soil and Rock

1.1.1.2 Washington State Department of Transportation (WSDOT)

M41-10-84

Standard Specifications for  
Road, Bridge, and Municipal  
Construction

1.2 SUBMITTALS: Refer to Section 01300 for submittal procedures.

1.2.1 Method to Prevent Damage During Excavation: Submit procedure proposed to prevent overstressing existing structures or interrupting service to existing facilities.

PART 2 - PRODUCTS

2.1 MATERIALS

2.1.1 General: Obtain select soils from excavation or other designated locations. Obtain onsite approval for soils.

2.1.2 Fill or Backfill: Well graded soil mixtures containing cobbles up to 6 inches in greatest dimension if uniformly distributed and not constituting more than 40 percent of volume of fill.

2.1.3 Stabilization: Crushed gravel meeting the requirements of WSDOT M41-10, Section 9-03.9(3), Base Course Classification.

PART 3 - EXECUTION

3.1 PREPARATION

3.1.1 Clear and Grubbing: Clear debris and organic materials from areas to be excavated and to be used for stockpile, and dispose of at site designated in Section 01500, Paragraph 1.3.3.

3.2 EXCAVATION

3.2.1 Before performing excavation, obtain excavation permit for area to be excavated. Excavation permits will be furnished by the Operating Contractor upon advance notice of scheduled activity.

3.2.2 Locate and expose underground utilities by hand tools. Use of heavy equipment and machinery is subject to approval of KEH.

3.2.3 Shore excavations more than 4 feet deep and with sides sloped steeper than 1-1/2 horizontal to 1 vertical. Install shoring as excavation progresses.

3.2.4 Store excavated material at stockpile areas shown on the Drawings. Water stockpile to ensure dust control.

3.2.5 Wherever slopes of excavations will intersect existing underground lines or structures such as building foundations, underground piping, electrical ducts or direct buried electrical lines, install shoring or other means of support to prevent overstressing existing structure or underground lines or to prevent interrupting service to existing buildings.

3.3 INSTALLATION

3.3.1 Fill and Backfill

3.3.1.1 General

a. Backfill Permit: Obtain signatures required on backfill permit for area to be backfilled. Work not started within 5 calendar days from time permit is approved shall not be started until new permit has been approved. A continuing job that has not had backfill installed within past 5 calendar days will require new backfill permit.

b. Remove debris and organic matter from area to be filled or backfilled.

c. Use only select materials for fill or backfill. Keep materials free of frozen particles, lumps, organic matter and trash.

d. Do not place fill or backfill on frozen ground.

e. Filling or backfilling by sluicing or flooding with water will not be permitted.

3.3.1.2 Common

a. Place fill or backfill in layers not more than 12 inches thick, loose measurement.

b. Compact each layer, full width, by at least 1 pass of vibratory- or rammer-type compactor, pneumatic-tired roller, loaded scraper wheel, grader wheel, or power roller.

3.3.2 Finish Grading and Stabilization

3.3.2.1 Rake area disturbed by work, remove surface stones larger than 6 inches and dispose of excess material and debris at area designated by KEH.

3.3.2.2 Stabilize locations shown on the Drawings.

3.4 FIELD QUALITY CONTROL

3.4.1 Soil Compaction Tests: Sampling and testing of compacted fill and backfill will be performed by KEH.

END OF SECTION

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OCT 27 1988

OCT 24 1988

Page 1 of 3

ENGINEERING CHANGE NOTICE (USE BLACK INK OR TYPE)			(1) ECN <u>B-714-5</u>
(2) IMPACT LEVEL <u>3</u>	(3) PROJECT TITLE/NO./WORK ORDER NO. Grouted Waste Disposal Facility Grout Vault Pair (218-E-16-102)	(4) BLDG/SYS FAC NO. <u>N/A</u>	(5) RELATED ECN NO. N/A
(6) CLASSIFICATION TYPE N/A	(7) DOCUMENT NO. V-B714C1-001 B-714-C1	(8) SHEET <u>N/A</u>	(9) REV. 0
(10) TITLE OF CHANGE Inspection Points		(11) AUTHORIZING WORK DOC. NO. N/A	(12) RELATED P.O. NO. N/A

## (13) DESCRIPTION OF CHANGE

Division 1, Section 01400, Paragraph 1.3.2:

Add the following:

a. Specific inspection and witness points are defined as follows.

1) Construction Inspection (H): Required for witnessing of specific construction features, before further construction is allowed to proceed.

2) Witness (W): Selected for inspection at option of KEH. Work may proceed upon verbal release by KEH or upon expiration of 1 hour beyond scheduled time of witness.

b. H and W points apply to onsite work. Except where longer notification period is specified, Contractor shall notify KEH at least 4 working hours before each point for onsite work.

Continued

(14) JUSTIFICATION		(15) REMARKS	OFFICIAL RELEASE (22) BY WHC DATE OCT 24 1988 <i>Sta # 4</i>
<input type="checkbox"/> EASE OF CONSTRUCTION <input type="checkbox"/> SUBSTITUTION <input type="checkbox"/> CONST. ERROR/OMISSION <input type="checkbox"/> EXIST. FIELD CONDITION		<input type="checkbox"/> ENGR. ERROR/OMISSION <input checked="" type="checkbox"/> CRITERIA CHANGE <input type="checkbox"/> CLIENT REQUEST	
(16) ESTIMATED EFFECT: <input checked="" type="checkbox"/> ADDITIONAL <input type="checkbox"/> SAVINGS ENGINEERING COST \$ <u>350.00</u>		<input type="checkbox"/> ADDITIONAL <input type="checkbox"/> SAVINGS CONSTRUCTION COST \$ <u>None</u>	<input type="checkbox"/> DELAY <input type="checkbox"/> IMPROVEMENT SCHEDULE IMPACT <u>None</u>
(17) ORIGINATOR R. D. Chapman	(18) PHONE 3-2577	DATE 10/5/88	ORGANIZATION KEH
(19) ALL DOCUMENTS REVISED BY:			
KEY A = APPROVAL R = REVIEW PR = POST REVIEW I = INFORMATION ONLY			
(20) APPROVAL ARCHITECT/ENGINEER		(20) APPROVAL OPERATING FACILITY	
ACTION SIGNATURE DATE		ACTION SIGNATURE DATE	
A DESIGN <i>W.S. 9/11/88</i> 10/7/88		A COG. PROJ. ENGR. <i>John Payne for SRB</i> 10-19-88	
A SAFETY <i>Spent...</i> 10-7-88		A COG. PROJ. ENGR. <i>John Payne for SRB</i> 10-19-88	
A QA <i>R. D. Chapman</i> 10-7-88		A QA <i>John Payne for SRB</i> 10-19-88	
A PE <i>John Payne for SRB</i> 10-7-88		SAFETY	
OTHER		SSEA COUNCIL	
DEPARTMENT OF ENERGY		CUSTOMER/DOE	
		PROJ. MGMT. DEPT. MGR	
		FACILITY REP. (OPS)	
		CONST./FAB	
		SECURITY	

A-7900-013 (12-87)

(SIDE 1)



ENGINEERING CHANGE NOTICE  
CONTINUATION SHEET(7) Document No.  
V-8714C1-001  
B-714-C1Rev  
10-7-88(18) Date  
10/5/88(1)  
ECN B-714-5

## 1.3.2.1 H and W points

- a. Initial excavation: H
- b. Initial berming activities: H
- c. Final excavation: W

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## DISTRIBUTION SHEET

To	From	Page	of	
DISTRIBUTION	SR BRIGGS 24320	1	1	
Project Title/Work Order		Date	9/29/88	
B-714; GROUT VAULTS		EDT No.	101290	
		ECN No.	NA	

Name	MSIN	With Attach.	EDT/ECN & Comment	EDT/ECN Only
H. SALES · KEH	1256 Dwg 3000/A	X		
45 Full Size DWGs				
45 COPIES OF D-714-C1				
JD CLOUD · KEH	TCPC	X		
3 SETS Full Size DWGs				
1-1/2 Size Set DWGs				
M 4 COPIES OF D-714-C1	T			
WJ M'GRUDER · KEH	TCPC	X		
1 SET Full Size DWGs				
1-1/2 Size Set DWGs				
2 COPIES OF D-714-C1				
KEH CONSTR. DOC. CONTROL	2910-E 200 EAST	X		
5 SETS Full Size DWG				
5 COPIES OF D-714-C1				
J. M. ALLISON · WHC 1/2 Size DWGs COPY SPLS.	R1-48	X		
DL BOORIC · "	R1-48	X		
DE BOWERS · "	R1-67	X		
JE BRANSON · "	T1-30	X		
SR BRIGGS · "	R3-43	X		
GD CAMPBELL · "	R1-40	X		
OA HALVORSON · "	R3-09	X		
JD HERB · "	R1-51	X		
JR N'GEE · "	S1-54	X		
MD NORTLEY · "	R3-43	X		
DE PALMER · "	R3-43	X		
JL STEWART · "	R3-09	X		
JL VIGOR · "	S5-02	X		
DD WOORICH · "	R1-40	X		
JC STOVER · DOE-RL	A	X		

UNCONTROLLED COPY

INITIAL RELEASE AND CHANGE CONTROL RECORD		(2) Document Number V-B-714-C1-001	Page
		INITIAL RELEASE	
(1) Title B-714-C1 CONSTRUCTION SPECIFICATION FOR EXCAVATION		(3) Cognizant/Project Engineer DR B. [Signature]	Date 9/30/88
		(4) Cognizant/Project Manager DR [Signature]	Date 9/30/88
		(5) EDT Number 101290	Revision 0
CHANGE CONTROL RECORD			
(6) Revision	(7) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(8) Cog./Proj. Engr	(9) Cog./Proj. Mgr Date
00231391365			



Westinghouse  
Hanford Company

P O Box 1970  
Richland, Washington 99352

Hanford Operations and Engineering Contractor  
for the U S Department of Energy  
under Contract No DE-AC06-87RL10930.

Y-B714C1-001  
REVO

## SPECIFICATION FOR

EDS 601-5 PA 1-5  
ENGINEERING FILES

Building: 218-E-16  
Project: B-714  
Impact Level: III



OFFICIAL RELEASE  
BY WHC  
DATE SEP 30 1988

Prepared By:

KAISER ENGINEERS HANFORD COMPANY

Approved By:

LR Briggs; UHC

Date

9/30/88